This listing of claims will replace all prior versions, and listing, of claims in the application:

Complete Listing of Claims

Claims 1 to 95 (cancelled)

CLAIMS:

96. (new) A method for measuring or identifying a component, said method comprising the steps of:

positioning a fibre within an animal or animal tissue, said fibre being at least partially coated with an extraction phase for extracting said component;

extracting said component;

removing the fibre from said animal or animal tissue;

desorbing said component from the extraction phase; and

identifying or measuring said component.

97. (new) The method of claim 96, wherein said fibre is positioned within a blood vessel, and wherein said component is a blood component.

98. (new) The method according to claim 96, wherein said fibre is one of a plurality of fibres.

99. (new) The method of claim 96, wherein the extraction phase comprises a calibrant capable of partial release from the extraction phase during said extracting step by convection or diffusion.

100. (new) The method of claim 96, wherein the extraction phase comprises a calibrant capable of being retained in the extraction phase during said extracting step.

101. (new) A device for collecting a component from an animal or animal tissue, said device comprising:

at least one fibre having an end which is at least partially coated with an extraction phase for extracting said component; and

a positioning device for guiding said end into position within the animal or animal tissue.

102. (new) The device of claim 101, wherein said fibre is at least partially coated with a biocompatible protection layer.

103. (new) The device of claim 102, wherein said biocompatible protection layer comprises polypyrrole or derivatised cellulose and said extraction phase comprises either (a) a polymeric composition selected from the group consisting of substituted or unsubstituted poly (dimethylsiloxane), polyacrylate, poly (ethylene glycol), carbon, poly(divinylbenzene) and polypyrrole or (b) a bioaffinity agent on the surface of the extraction phase, said bioaffinity agent being selected from the group consisting of a selective cavity, a molecular recognition moiety, a molecularly imprinted polymer and an immobilized antibody.

104. (new) The device of claim 101, wherein said extraction phase is a matrix for a MALDI-TOFMS analysis.

105. (new) The device of claim 101, wherein said extraction phase contains a calibrant.

106. (new) The device of claim 101, wherein said extraction phase contains a fluorescent label or an enzyme.

107. (new) The device of claim 101, further comprising an openable housing for said fibre.

108. (new) The device of claim 101, wherein said positioning device includes a catheter.

109. (new) The device of claim 101, comprising a plurality of said fibres capable of being simultaneously positioned in separate locations in said animal or animal tissue.

110. (new) The device of claim 101, in a form suitable for positioning said fibre within an analytical instrument.

111. (new) A method for measuring or identifying a component in an animal or animal tissue, said method comprising the steps of:

positioning a device according to claim 101 into an animal or animal tissue;

extracting the component;,

removing the device from said animal or animal tissue; and

desorbing said component from said extraction phase for measurement or identification.

112. (new) A method of measuring or identifying a component in a plurality of liquid samples arranged in a plurality of wells in a multiwell sample plate, said method comprising:

providing a plurality of fibres arranged to be simultaneously positioned in said plurality of wells, wherein each said fibre is at least partially coated with an extraction phase for extracting the component;

contacting the liquid with the fibres;

extracting the component;

removing the fibres from the wells; and

measuring or identifying the component.

113. (new) The method of claim 112 wherein said measuring or identifying is performed by a MALDI or nanospray analytical instrument or a multichannel micromachined microfluidic device.

114. (new) A device for measuring or identifying a component in a plurality of liquid samples arranged in a plurality of wells in a multiwell sample plate, said device comprising:

a plurality of fibres arranged to be simultaneously positioned in said plurality of wells, wherein each said fibre is at least partially coated with an extraction phase for extracting the component; and

a positioning device for guiding fibres into the plurality of wells.

115. (new) A microextraction method for measuring a component in a sample, said method comprising the steps of:

adding a calibrant to an extraction phase;

contacting the extraction phase and calibrant with the sample to microextract said component from the sample; and

determining the amount of the component in said sample using measured amount of standard remaining in said extraction phase.

116. (new) A method for calibration of an analytical instrument, said method comprising
the steps of:

adding a calibrant onto a fiber coated with an extraction phase;

introducing said extraction phase containing said calibrant into an analytical instrument; and

desorbing the calibrant from the extraction phase into said analytical instrument.